

[Amendment under the provision of PCT Article 34(2)(b)]

Amendment

(Amendment under the Provisions of Article 11 of the Law concerning the International Application of PCT and Related Matters)

Examiner of Patent Office: Eiichi Yoshida

1. Indication of International Application:

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4. Subject of the Amendment:

Claims

5. Details of the Amendment:

(1) In the Claim 1, page 1 (page 22), line 5 (corresponding to page 29, line 10 of its English version), amend "to the adapter" to read --to the adapter one by one--.

(2) In the Claim 3, page 1 (page 22), lines 1-2 and line 2 (corresponding to page 29, line 20 and line 21 of its English version), amend "a guide(s)" to read --a groove guide(s)--, and amend "a member for alignment which engages with said guide." to read --a convex member for alignment which engages with said groove guide.--.

(3) In the Claim 4, page 1 (page 22), line 1 and line 2 (corresponding to page 29, line 23 and lines 24-25 of its English version), amend "the adapter have" to read --the adapter have each--, and amend "the plug is fixed to the adapter by inserting a guide pin into said through-hole." to read --said through-hole being capable of being slidably inserted by a guide pin therein, and the plug is fixed to the adapter by inserting the guide pin through said through-hole of the adapter into said through-hole after the plug is attached to the adapter.--.

(4) In the Claim 5, page 1 (page 22), line 3 (corresponding to page 29, line 28 and page 30, line 1 of its English version), amend "said plug is equipped" to read --said plug is slidably equipped-- and "optical fibers." to read --optical fibers after the plugs are attached to the adapter.--.

(5) In the Claim 8, page 2 (page 23), lines 2-3 (corresponding to page 30, lines 11-12 of its English

version), amend "an adapter for fixing said plugs," to read --an upper open-type adapter to which said plugs are attached in a direction perpendicular to the axial direction of the optical fiber,---.

(6) In the Claim 10, page 2 (page 23), line 4 (corresponding to page 30, lines 24-25 of its English version), amend "and a guide pin is inserted into said through-hole." to read --said through-hole being capable of being slidably inserted by a guide pin therein, and the guide pin is inserted through the through-hole of the adapter into said through-hole of the plug after the plug is attached to the adapter.---.

(7) In the Claim 11, page 2 (page 23), line 3 (corresponding to page 30, lines 28-29 of its English version), amend "an adapter" to read --an adapter one by one---.

6. List of Appended Documents:

(1) Substitute sheets for pages 1 (page 22), 1/1 (page 22/1) and page 2 (page 23), 2/1 (page 23/1) of Claims (corresponding to pages 29-32 of its English version).

CLAIMS FOR PATENT

1. (Amended) An optical fiber connection structure wherein optical fibers are connected by means of a component
5 for connecting optical fibers comprising two plugs, into which at least one optical fiber has been inserted respectively, for aligning said optical fibers and connecting them, and an adapter for fixing said plugs, which comprises that the plugs are fixed to the adapter by
10 attaching each plug, into which the optical fiber has been inserted, to the adapter one by one in a direction perpendicular to the axial direction of the optical fiber.

2. The optical fiber connection structure according to Claim 1, wherein either the plug or the adapter is equipped
15 with a latch member and the other has a latch engaging section(s), and the plug is fixed to the adapter by engaging the latch member with the latch engaging section.

3. (Amended) The optical fiber connection structure according to Claim 1 or Claim 2, wherein either the plug or
20 the adapter has a groove guide(s) for alignment and the other is equipped with a convex member for alignment which engages with said groove guide.

4. (Amended) The optical fiber connection structure according to Claim 1, wherein the plug and the adapter have
25 each a through-hole(s) for alignment, said through-hole being capable of being slidably inserted by a guide pin therein, and the plug is fixed to the adapter by inserting the guide pin through said through-hole of the adapter into said through-hole after the plug is attached to the adapter.

30 5. (Amended) The optical fiber connection structure according to Claim 1, wherein the plug is equipped with one or plural ferrules, each ferrule of said plug is slidably equipped with a ferrule aligning member capable of sliding

in a direction of the center axis of the optical fiber, and the ends of ferrules brought face to face with each other are located inside said ferrule aligning member as a result of sliding said ferrule aligning member in a direction of the center axis of the optical fibers after the plugs are attached to the adapter.

6. The optical fiber connection structure according to Claim 5, wherein said ferrule aligning member is previously attached to the adapter.

7. The optical fiber connection structure according to Claim 5, wherein said ferrule aligning member is previously attached to a ferrule of at least one of two plugs.

8. (Amended) A component for connecting optical fibers comprising two plugs, into which at least one optical fiber has been inserted respectively, for aligning said optical fibers and connecting them, and an upper open-type adapter to which said plugs are attached in a direction perpendicular to the axial direction of the optical fiber, wherein either the plug or the adapter is equipped with a latch member and the other has a latch engaging section(s).

9. The component for connecting optical fibers according to Claim 8, wherein either the plug or the adapter has a guide for alignment and the other is equipped with a member for alignment which engages with said guide.

10. (Amended) A component for connecting optical fibers comprising two plugs, into which at least one optical fiber has been inserted respectively, for aligning said optical fibers and connecting them, and an adapter for fixing said plugs, wherein said plugs and adapter have a through-hole(s) for alignment, said through-hole being capable of being slidably inserted by a guide pin therein, and the guide pin is inserted through the through-hole of the adapter into said through-hole of the plug after the

plug is attached to the adapter.

11. (Amended) An optical fiber connecting method which comprises a step of inserting at least one optical fiber into two plugs respectively, a step of attaching said two
5 plugs to an adapter one by one in a direction perpendicular to the axial direction of the optical fiber and a step of fixing said two plugs to the adapter.

12. The optical fiber connecting method according to Claim 11 which comprises a step of fixing the plugs to the
10 adapter using two plugs and an adapter having each a through-hole(s) for alignment, said step comprising previously inserting a guide pin into the through-hole(s) of each plug, opposing plugs with each other, inserting another guide pin into the through-hole(s) in one edge of said
15 adapter to forcibly push said guide pin previously inserted into the plug, thereby fixing the opposed plugs to the adapter.

13. The optical fiber connecting method according to Claim 12, wherein a fixing member provided with a guide
20 pin(s) and being slidable to the adapter is used as a means for insertion of another guide pin into the through-hole(s) of the adapter and the adapter is mounted on the fixing member, which comprises sliding said fixing member in one direction so as to insert the guide pin into the through-
25 hole of the adapter.

14. The optical fiber connecting method according to Claim 11, wherein two plugs equipped each with a ferrule are used, which comprises a step of attaching slidably a ferrule aligning member to the ferrule of at least one of plugs,
30 into which an optical fiber(s) is inserted, a step of attaching each plug to the adapter in a direction perpendicular to the center axis of optical fiber to fix the plugs to the adapter in such a state that the ferrules of

the plugs oppose near to each other, and a step of sliding the ferrule aligning member in a direction of center axis of the optical fiber so that the ends of the opposed ferrules are located inside said ferrule aligning member.

5 15. The optical fiber connecting method according to Claim 11, wherein two plugs equipped each with a ferrule are used, which comprises a step of attaching one of two plugs, into which an optical fiber(s) is inserted, to an adapter equipped slidably with a ferrule aligning member in a
10 direction perpendicular to the center axis of the optical fiber, and sliding said ferrule aligning member so as to attach to the ferrule, a step of attaching the other plug to the adapter in a direction perpendicular to the center axis of the optical fiber so that the ferrules oppose near to
15 each other, and a step of sliding the ferrule aligning member in a direction of the center axis of the optical fiber so that the ends of opposed ferrules are located inside said ferrule aligning member.

 16. The optical fiber connecting method according to
20 Claim 14 or Claim 15, wherein the plug is equipped with a plurality of ferrules.